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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,970	01/21/2004	Ju-Byung Lee	678-1170 (P10817)	4076

28249 7590 10/25/2005
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EXAMINER

DAGOSTA, STEPHEN M

ART UNIT	PAPER NUMBER
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2683

DATE MAILED: 10/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/761,970

Applicant(s)

LEE, JU-BYUNG

Examiner

Stephen M. D'Agosta

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,7,8,12,18 and 19 is/are rejected.
- 7) ☒ Claim(s) 3-6,9-11 and 13-17 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 7-8, 12 and 18-19 rejected under 35 U.S.C. 103(a) as being unpatentable over Tsurumi US 6,074,215 and further in view of JP02000122671 and Toriumi US 6,062,868.

As per **claims 1, 7 and 18-19**, Tsurumi teaches a method of providing a Karaoke service to a mobile terminal through a wireless connection (figure 1 shows storage system #1 connecting to substations/Karaoke terminals via a communication satellite – note that some terminals can receive data directly from the satellite, see #3 terminals. C4, L5 to C5, L5), comprising the steps of:

grouping the mobile terminal with mobile terminals having a wired/wireless connection function to receive the Karaoke service together as a service group (figure 1 shows terminals #5 grouped together via LAN. One skilled understands that wireless LAN technology is an equivalent);

designating one of the mobile terminals as a “control” mobile terminal;
designating all other mobile terminals as “non-control” mobile terminals (figure 1 shows a sub-station #4 which is interpreted as a “control” terminal while the karaoke terminals #5 are interpreted as non-control terminals);

connecting the master mobile terminal to a Karaoke service provider through a mobile communication network and controlling service content to be received from the Karaoke service provider in all the mobile terminals of the service group (figure 1 shows the service provider/database #1 connecting to the control units (eg. sub-host stations, #4 via satellite/wireless connection);

But is silent on master and slave terminals,
and playing Karaoke music according to the service content by all the mobile terminals in the service group when the master mobile terminal transmits a play command to the slave mobile terminals.

JP02000122671A teaches a karaoke system whereby a “master device” connects to a service provider and downloads/stores songs and then said master can connect to another device, ie. a “slave device” (Abstract). This master and slave concept inherently provides support for said master commanding when the slaves will play their music. Further to this point is **Toriumi** who teaches a sing-along data transmitting method whereby a data center transmits video/music data to a “plurality of sing-along data receiving terminals” (abstract, figure 1, 4-5 and C2, L55 to C4, L5), which inherently requires the receive terminals to all be started at the same time, otherwise the sing-along would be out of synchronization.

It would have been obvious to one skilled in the art at the time of the invention to modify Tsurumi, such that master and slave terminals are used and playing Karaoke music according to the service content by all the mobile terminals in the service group when the master mobile terminal transmits a play command to the slave mobile terminals, to provide one control entity for the group who starts/stops the karaoke music.

As per **claims 2 and 8**, Tsurumi teaches claim 1/7, **but is silent on** wherein the wireless connection is carried out by one of Bluetooth, IRDA (Infrared Data Association), and wireless LAN (Local Area Network).

Tsurumi teaches use of wireless communications (satellite) and wired communications (LAN). Wired LAN communications can be replaced by wireless communications such as IEEE 801.11. The examiner takes **Official Notice** that one skilled would use Bluetooth, IRDA or WLAN technology.

It would have been obvious to one skilled in the art at the time of the invention to modify Tsurumi, such that wireless connection is Bluetooth, IRDA or WLAN, to provide means for transmitting the data via well known industry standard technologies.

As per **claim 12**, Tsurumi teaches any of claims 7, wherein the slave mobile terminals receive the service contents from the master mobile terminal by the wireless connection (figure 1 shows karaoke terminals #5 receiving data from sub-host stations).

Allowable Subject Matter

Claims 3-6, 9-11 and 13-17 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art cited does not teach, either alone or in combination, the following highly detailed limitations:

As per **claim 3** - wherein the master and slave mobile terminals are synchronized according to a pilot channel clock signal for simultaneously playing in the playing step.

As per **claim 4** - further comprising the step of, when a call connection is attempted for the mobile terminal, releasing the mobile terminal from the service group and connecting a call to the mobile terminal.

As per **claim 5** - wherein the step of controlling the service content to be received comprises the steps of: searching for the service content from the Karaoke service provider; transmitting information about the service content to the slave mobile terminals in the service group; and receiving the service content from the Karaoke service provider according to the service content information in the master mobile terminal and the slave mobile terminals to receive.

As per **claim 6** - wherein the step of controlling the service content comprises the steps of: searching for the service content from the Karaoke service provider; receiving the service content from the Karaoke service provider in the master mobile terminal; and transmitting the service content from the master mobile terminal to the slave mobile terminals by wireless connections between the master mobile terminal and the slave mobile terminals.

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As per **claim 9** - wherein the master and the slave mobile terminals are synchronized according to a pilot channel clock signal for simultaneously playing in the playing step.

As per **claim 10** - further comprising the step of, when a call connection is attempted for the mobile terminal, releasing the mobile terminal from the service group and connecting a call to the mobile terminal.

As per **claim 11** - wherein the step of receiving the service contents, comprises the steps of transmitting information about the service contents from the Karaoke service provider to the slave mobile terminals through the master mobile terminal, and connecting the slave mobile terminals to the Karaoke service provider and transmitting the service contents to the slave mobile terminal.

As per **claim 13** - wherein the slave mobile terminals are further grouped as a predetermined number of sub-service groups according to a number of channels.

As per **claim 14** - wherein each of the sub-service groups receives different sound data and plays Karaoke music according to the sound data.

As per **claim 15** - wherein the sound data is from one of a left channel and a right channel for stereo sound.

As per **claim 16** - wherein the sound data is from one of channels for digital surround sound 5.1.

As per **claim 17** - wherein the sound data is from one of a predetermined number of sound sources divided from multiple sound sources.

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Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. Tsurumi et al. US 5,824,934
2. Sai et al. US 5,691,494
3. Nishimura et al. US 5,588,842
4. Fujita US 5,885,085
5. Mankovitz US RE37,131

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. D'Agosta whose telephone number is 571-272-7862. The examiner can normally be reached on M-F, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stephen D'Agosta
Primary Examiner
9-26-2005

